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April 10, 2000

Mr. Dale Hatfield
Chief, Office of Engineering and Technology
Federal Communications Commission
2000 M Street NW, Suite 480
Washington, DC 20554

Dear Mr. Hatfield:

As required by Part 63.100(a) of the Commissions Rules, AT&T hereby files its Final Service Disruption Report for an AT&T network outage.

1. DATE / INCIDENT LOCATION TIME:

March 11, 2000 02:50 AM EST

2. GEOGRAPHICAL AREA AFFECTED:

Cleveland, GA

3. CUSTOMERS AFFECTED (APPROXIMATELY):

34,172 (based on blocked calls)

4. TYPES OF SERVICES AFFECTED:

Toll Access and Toll Completing

5. DURATION OF OUTAGE:

8 Hours and 25 Minutes

6. BLOCKED CALLS:

102,517

7A. CAUSE OF INCIDENT:

A trunk rehome order was initially scheduled by the AllTel Telephone Company between Cleveland, GA and Atlanta, GA, but was cancelled before the add orders were completed. The order cancellation was not disseminated within AT&T, therefore the delete orders issued to remove the screening translations supporting the old trunks were processed in error.

For all pending delete orders, the CCS Network Administration Center (CNAC) requires a trap to be set at the Signaling Transfer Point (STP) to determine if live traffic still exists on the trunk group scheduled to be deleted. If no traffic is found, then the pending delete order is sent to the screening Network Interconnect Screening Tool (NIST) operations support system for processing.

While performing work on the delete orders to remove trunks between Cleveland, GA and Monticello, GA, traps were properly set according to the CNAC standards, and traffic was detected. Instead of the order being halted, the order was inadvertently released and sent to the NIST operations support system pending manual removal of the screening translations. A second order was simultaneously generated in NIST for a different work request, but still involving the same signaling link. Because the pending deletes for Cleveland were undetected in NIST, they were picked up along with this second order, and sent to the provisioning system. The provisioning system then sent the deletes into the network and removed the screening translations for the trunks between Cleveland, GA and Monticello, GA, resulting in the service disruption.

7B. EQUIPMENT NAME / TYPE:

4ESS

7C. PART OF NETWORK:

Cleveland, GA - Monticello, GA

8. RESTORATION METHODS:

Service restoration began when new trunks were turned-up between Cleveland, GA and Atlanta, GA. However, as the customer service impact continued, further investigation determined that a signaling problem still remained. The CNAC organization was contacted and the screening translations were placed back into the STPs to support the old trunk group between Cleveland, GA – Monticello, GA, and this activity restored service.

9. STEPS TO PREVENT REOCCURRENCE:

The following three areas of improvement were identified during the root cause analysis investigation.

1. Communications: Work is in progress to utilize a common web based network events calendar containing detailed schedules and status of network events. This improvement will allow easy and more efficient access to network event information for the work centers that perform this work, and will also cross-reference work activities.
2. Methods and Procedures (M&Ps): Updates covering the delete order process have been incorporated into the M&Ps to include the use of additional traffic verification steps. Work center awareness training has also been performed covering the additional changes and the use of the tools used in this process.
3. System Interface and Controls: Several system enhancements have been proposed and are being evaluated to improve data integrity and order control of the delete order process.

10. APPLICABLE BEST PRACTICES:

AT&T has reviewed the Network Reliability: A Report to the Nation, June 1993 and has evaluated all best practices in SECTION B- SIGNALING NETWORK SYSTEMS COMMITTEE TECHNICAL PAPER. Based on the root cause of this incident, AT&T will reinforce stronger adherence to the following recommendations to help eliminate future signaling link service disruptions.

5.2.4.5 SP/SSP Recommendations

Procedural Errors:

To minimize human errors related to misidentification of active CCS units as failed units requiring repair, network service providers should conduct an "Awareness Training Program" for all maintenance persons who work on SP/SSP CCS equipment including the importance of end to end communications when maintenance is being performed.

Scheduled Work Activities:

While certain scheduled activity during business hours is necessary, these results indicate that a large proportion of CCS impacting business hours downtime may be avoided by carrier company scheduling of SP/SSP CCS related work activities during off hours. At minimum, high risk, potentially service affecting maintenance and growth procedures should be scheduled during weekend and off-hours. Scheduling

should also take into account the fact if the procedure fails, and a significantly longer than expected outage occurs, it should not run into the business day. It is recommended that the methods, procedures and scheduling of these work activities be reviewed by a 2nd tier maintenance organization.

5.2.7.1.1 Recommendations

Procedural Errors:

The Switching System Focus Group (Procedures Subteam) identified four main sub-problems in their study, of which two were also identified as sub-problems in the FCC reports; failure to follow the correct hardware maintenance procedures (including mislabeling and removing the wrong unit from service) and data entry errors.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Del Corral", with a long horizontal flourish extending to the right.

B/C 90,000 - 149,999 3 days
B/C 150,000 & greater 120 minutes

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AT&T

Initial Service Disruption Report

FAX TO: FCC WATCH OFFICE, WASHINGTON, DC

202-632-6975 Voice

202-418-2812 FAX

ALTERNATE FCC WATCH OFFICER

202-418-2813 FAX

1.	Date/Time of Incident	03/11/00 0150 NWT / 0250 ET
2.	Geographic area affected	ATLANTA, GA AND MONTICELLO, GA
3.	Customers affected (est)	N/A
4.	Types of service affected	Toll ACCESS / Toll COMPLETE
5.	Duration of outage	8 HOURS 25 MINUTES
6.	Blocked calls (est)	102,518
7a	Cause of incident	PROCESS ERROR PROVISIONING
7b	Equipment name/types	4ESS ELECTRONIC SWITCHING SYSTEM
7c	Part of network affected	CLEVELAND, GA
8.	Restoration methods used	PROVISIONED NEW SERVICE FROM MONTICELLO, GA TO ATLANTA, GA
9.	Steps to prevent recurrences	N/A

AT&T contact person:	Mike DelCasino
Telephone number:	202-457-2023
Date/Time of report:	3/13/00 1220 NWT / 0120 NWT